

3.1.2 Calculate and explain, from given data, the values of crude birth rate, crude death rate, fertility, doubling time and natural increase rate.

- CRUDE BIRTH RATE (CBR) = $\left(\frac{\text{Births}}{\text{total pop.}} \right) \times 1000$

"NATALITY"

↑
This is
per year
↑

- CRUDE DEATH RATE (CDR) = $\left(\frac{\text{Deaths}}{\text{total pop.}} \right) \times 1000$

"MORTALITY"

← No impact with migration.

- Natural Increase Rate (NIR) = $\frac{(\text{Crude birth rate} - \text{crude death rate})}{10} = \underline{\hspace{2cm}} \%$

- DOUBLING TIME = $70 / \text{NIR}$

↑
Time it takes
for a population
to double in size.

- FERTILITY RATE ← Always a %
 $\frac{\text{Number births}}{1000 \text{ ♀ of childbearing age}}$

- Total fertility = Average number of children each women has in her lifetime.

↑
> 2.0 children in a woman's life → pop. increase
< 2.0 children in a woman's life → pop. decrease.

* Replacement Fertility # of children it takes to replace parents.
higher in LEDC than in MEDC